

FIG. 1



FIG. 2

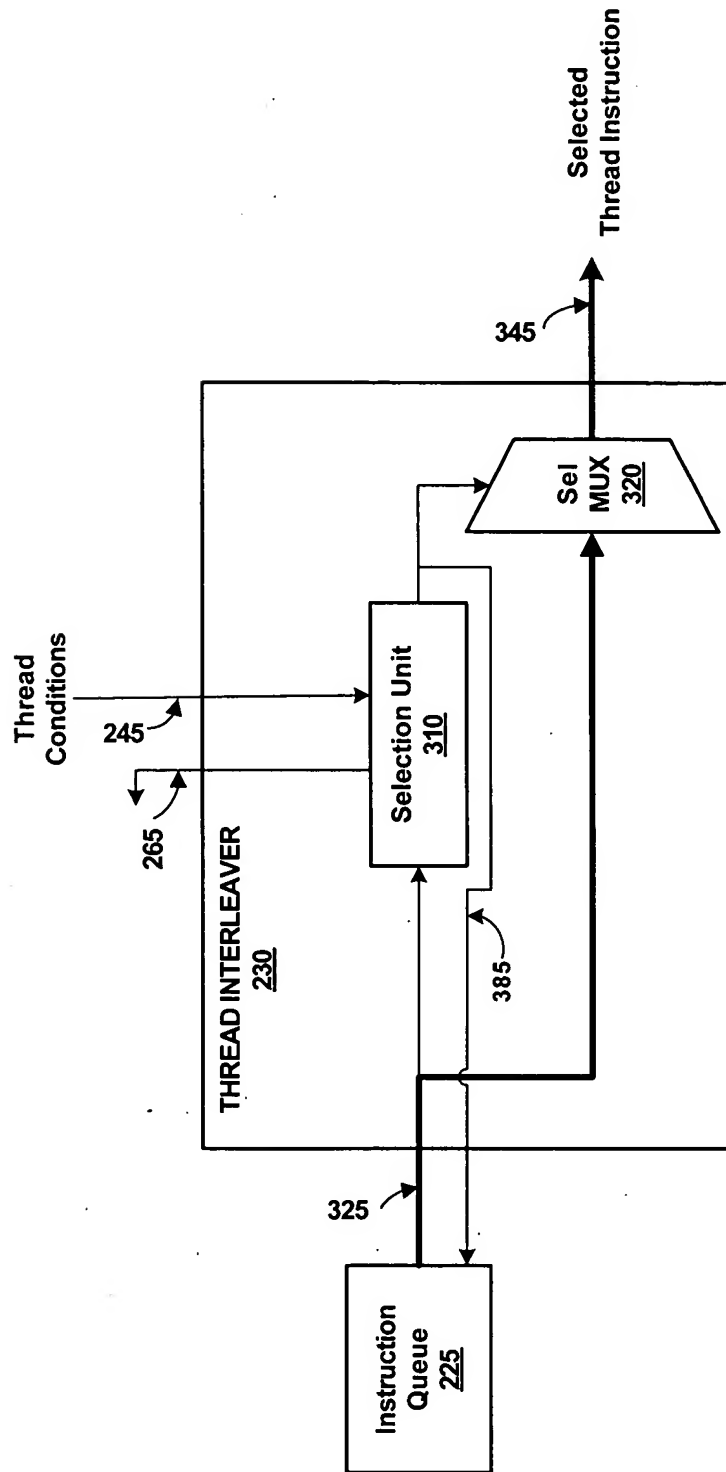


FIG. 3

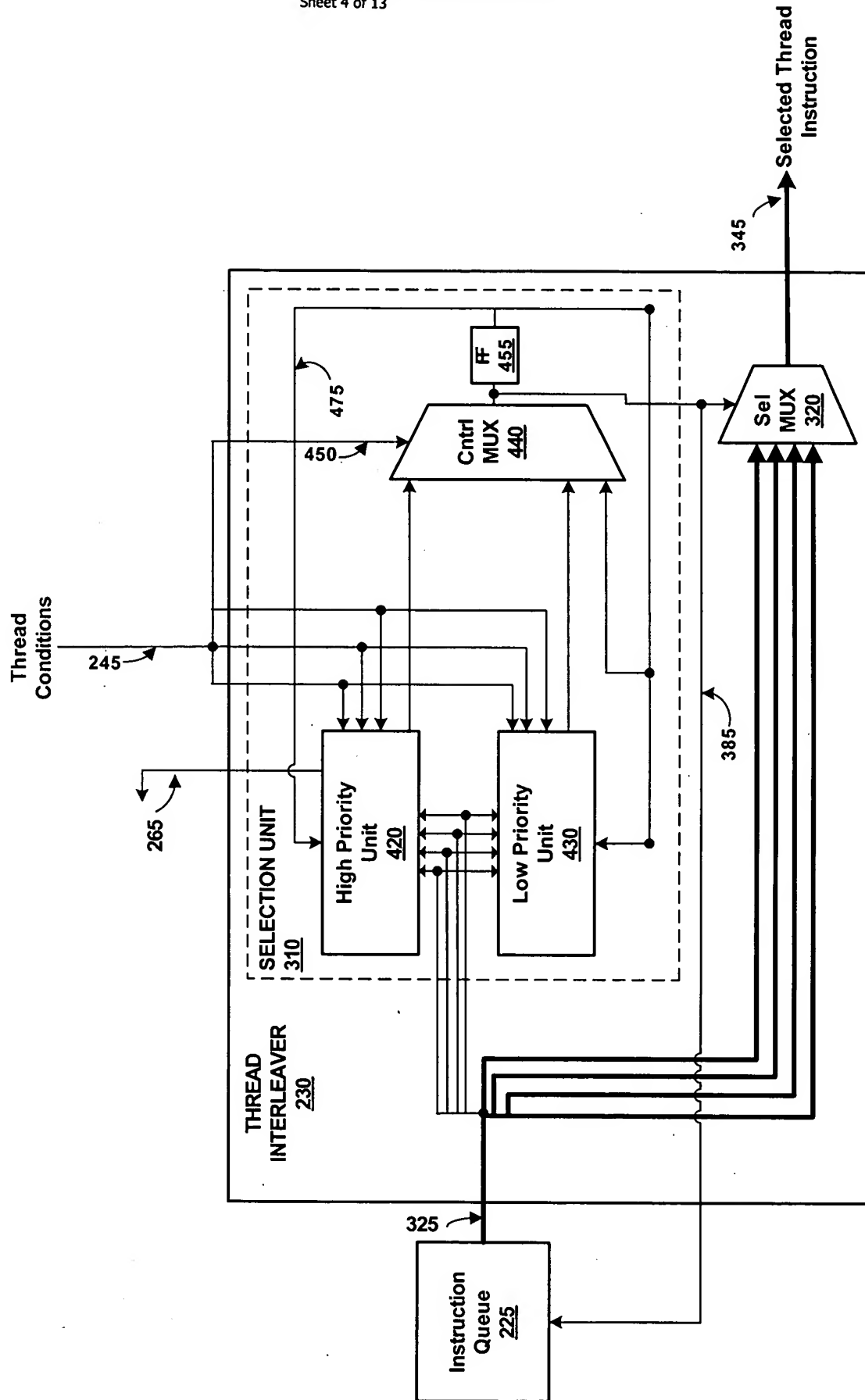


FIG. 4

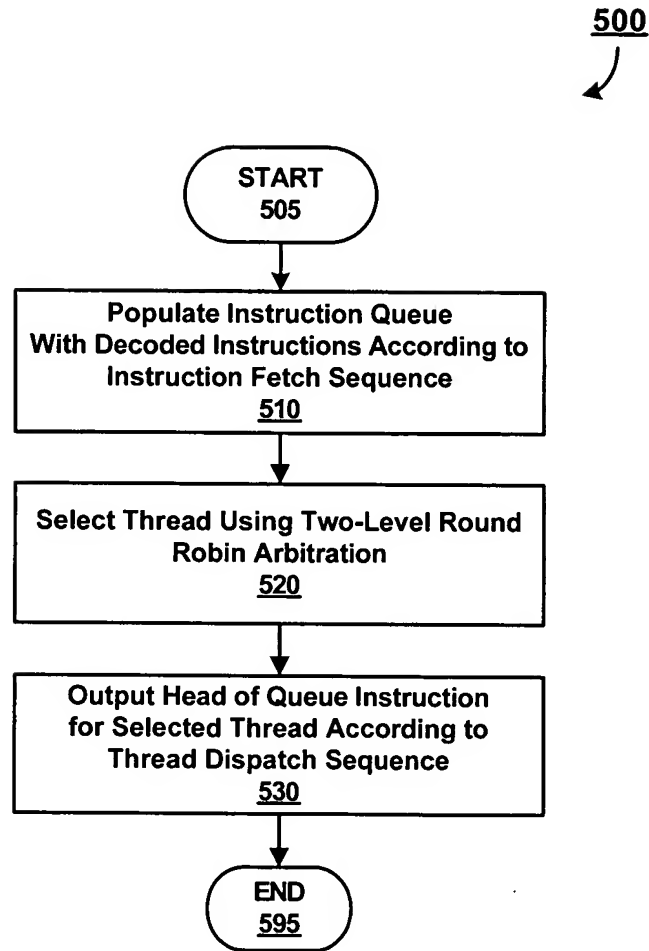


FIG. 5A

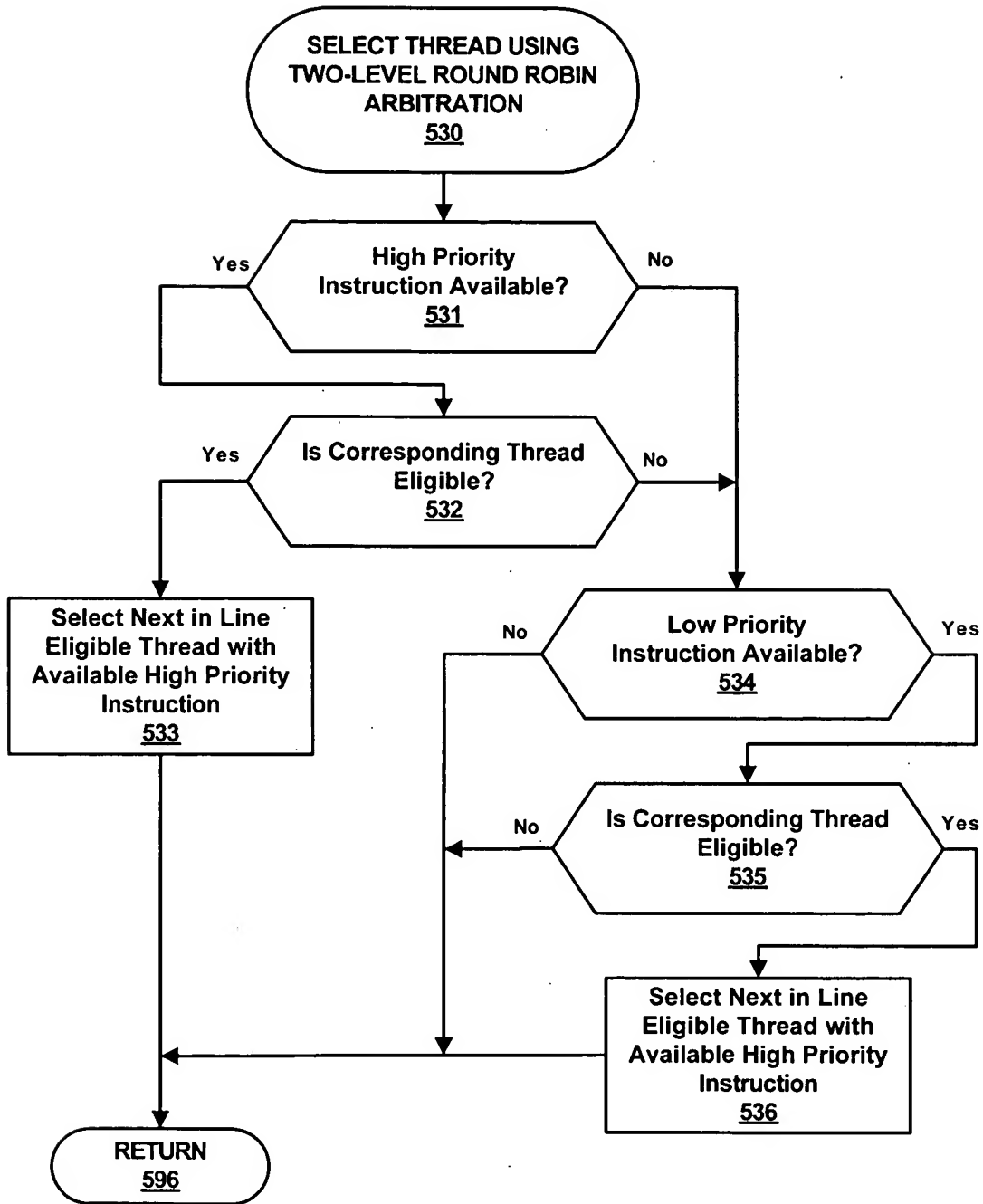


FIG. 5B

[Priority / Availability / Eligibility]
610

	T ₁	T ₂	T ₃	T ₄	Previous Selection
t	[0/1/1]	[0/0/0]	[1/1/1]	[0/1/0]	—
t+1	[0/1/1]	[1/1/1]	[1/0/1]	[1/1/0]	T ₃ ¹
t+2	[0/1/1]	[0/0/1]	[1/0/1]	[1/1/0]	T ₂ ¹
t+3 (global stall)	[0/0/0]	[0/1/0]	[1/0/1]	[1/1/1]	T ₁ ¹
t+4	[0/0/0]	[1/1/0]	[1/0/1]	[1/1/1]	—
t+5	[0/0/0]	[1/1/1]	[1/1/1]	[0/1/1]	T ₄ ¹
t+6	[0/0/0]	[1/1/0]	[1/1/1]	[0/1/0]	T ₂ ²

620

FIG. 6A

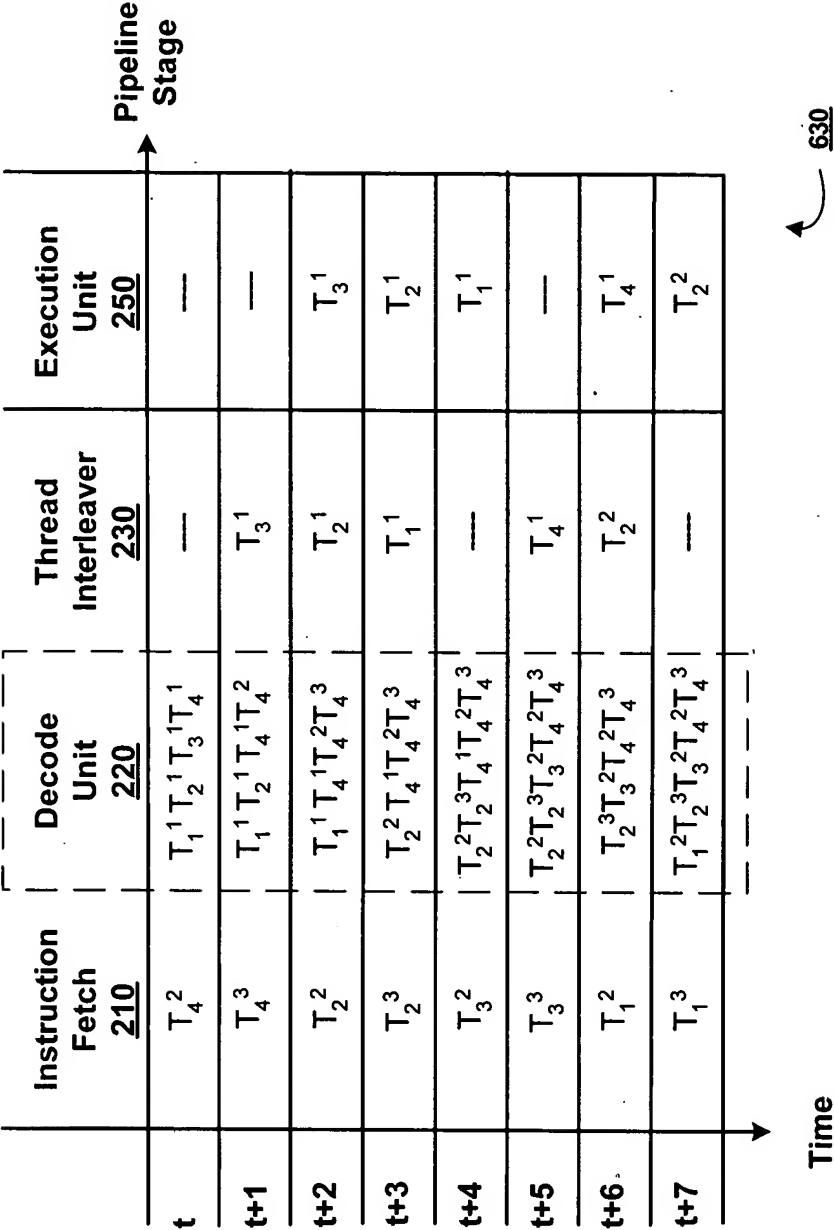


FIG. 6B

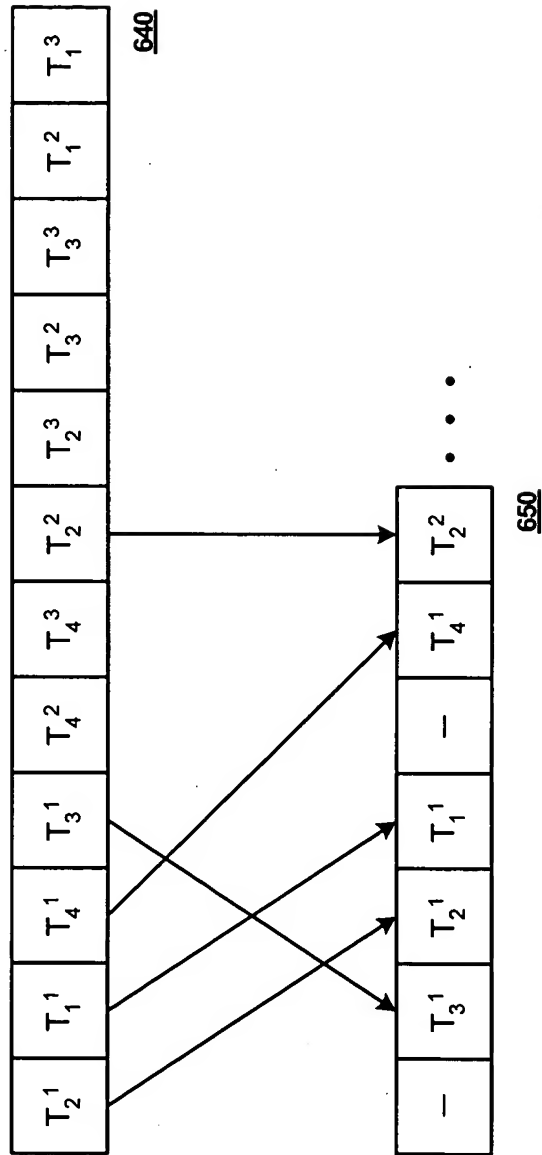


FIG. 6C

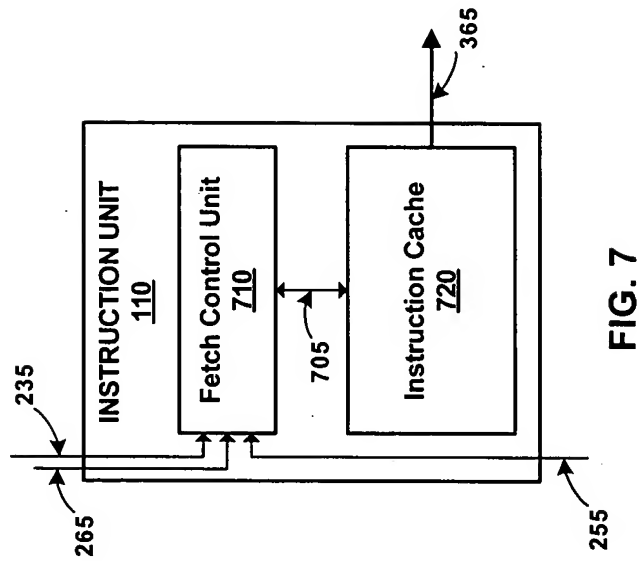
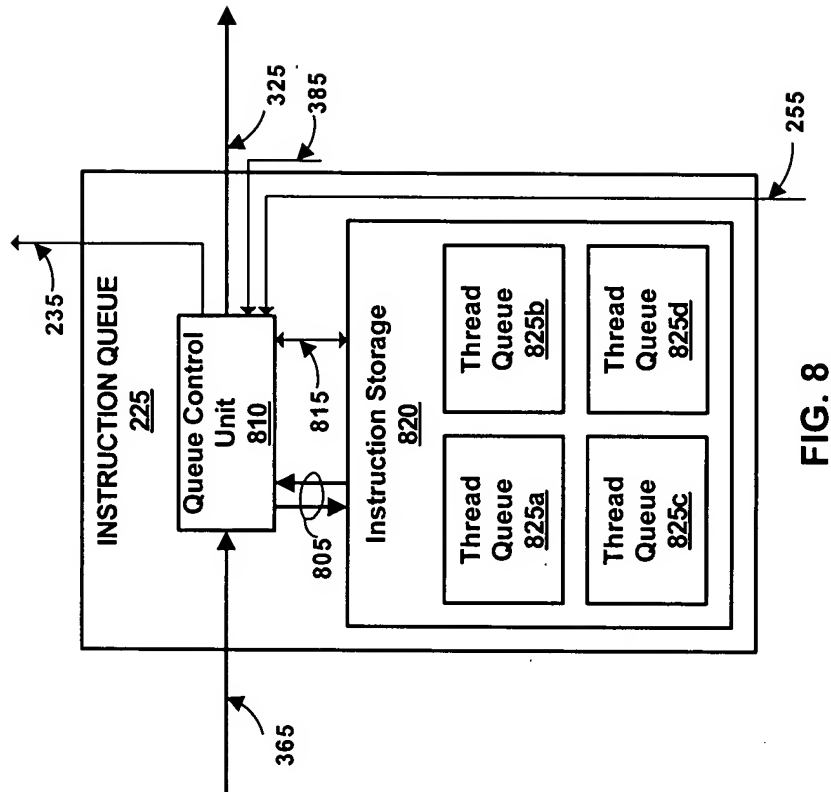


FIG. 7



900

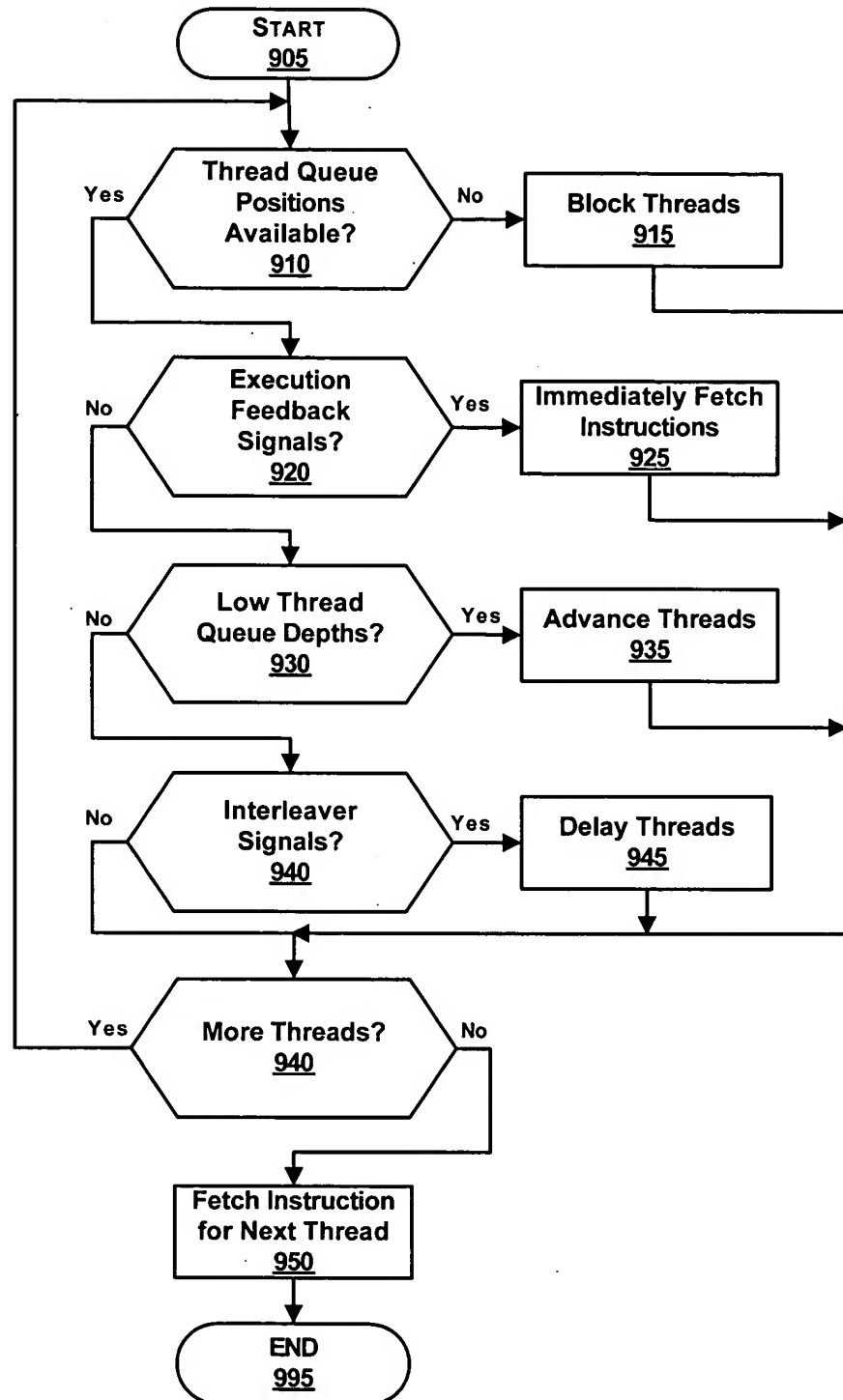


FIG. 9

[No Queue Position Available / Branch Misprediction / Low Queue Depth / Ineligible for Execution]
1010

	T_1	T_2	T_3	T_4	Fetch Control Unit <u>710</u>
t	[0/0/0/0]	[0/0/0/0]	[0/0/0/0]	[0/1/0/0]	Immediately Fetch for T_4
$t+1$	[1/0/0/0]	[0/0/0/0]	[0/0/0/0]	[0/0/0/0]	Block Fetch for T_1
$t+2$	[0/0/0/0]	[0/0/1/0]	[0/0/0/0]	[0/0/0/0]	Advance Fetch for T_2
$t+3$	[0/0/0/0]	[0/0/0/0]	[0/0/0/0]	[0/0/0/0]	No Input for Response
$t+4$	[0/0/0/0]	[0/0/0/0]	[0/1/0/0]	[0/1/0/0]	Immediately Fetch for T_3

1020

FIG. 10A

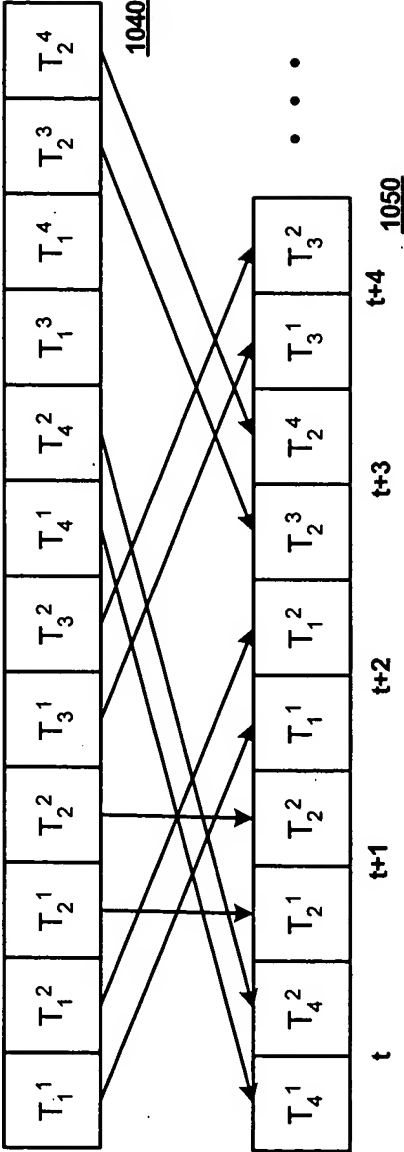


FIG. 10B